

ADDING IMPERCEPTIBLE NOISE TO AUDIO SIGNALS TO CAUSE SIGNIFICANT DEGRADATION WHEN COMPRESSED AND DECOMPRESSED

ABSTRACT OF THE DISCLOSURE

Primarily in order to discourage compression of audio content signal data, particularly music, and thus to discourage its unauthorized reproduction and distribution, such as over the Internet, the audio data is modified in a manner that is normally not perceptible to the human ear when the signal is played but which causes the signal to be significantly degraded in a manner that is perceptible if the signal is later compressed and decompressed. In a specific implementation, certain frequency components of the audio signal that the human ear masks are increased in amplitude to levels below their masked levels so that they are not heard in the signal but which adversely affect its quality if compressed and decompressed.